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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,367	01/06/2005	Thomas Buntin Threewitt	PPD 50705	5091
26748 7590 09/18/2007 SYNGENTA CROP PROTECTION, INC. PATENT AND TRADEMARK DEPARTMENT 410 SWING ROAD GREENSBORO, NC 27409			EXAMINER SOROUSH, ALI	
			ART UNIT 1616	PAPER NUMBER
			MAIL DATE 09/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,367

Applicant(s)

THREEWITT ET AL.

Examiner

Ali Soroush

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

Acknowledgement of Receipt

Applicant's response filed 08/13/2007 to Office Action mailed on 02/15/2007 to Request Continued Examination is acknowledged.

Election/Restrictions

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Prosulfuron, dicamba, 2,4-D, halosulfuron-methyl, and quinclorac

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Prosulfuron: claims 1-3, 5, 6, and 9-12;

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Dicamba: claims 1-3, 5, 6, 9-11 and 13;
2,4-D: claims 1-3, 5, 6, 9-11 and 14;
halosulfuron-methyl: claims 1-3, 5, 6, 9-11 and 15;
Quinclorac: claims 1-3, 5, 6, 9-11 and 16.

The following claim(s) are generic: None.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: the prior art teaches composition comprising mesotrione and dicamba, therefore the invention lacks unity.

During a telephone conversation with William A. Teoli, Jr. on 09/11/2007 a provisional election was made with traverse to prosecute the invention of , claims 1-3, 5, 6 and 9-12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-16 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 5, 6, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornes (International Application published under PCT WO 02/100173; published December 19, 2002) in view of Kent et al. (Technology of Cereals; published 1994).

Applicant Claims

Applicant claims a method of controlling weeds while reducing injury in a sorghum crop by applying to the locus of the weeds mesotrione and prosulfuron.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Cornes teaches a synergistic composition comprising mesotrione and a second herbicide. (See abstract) Prosulfuron is an herbicide that may be added to the composition. (See page 4, Line 15). Cornes further teaches "the object of the formulation is to apply the compositions to the locus where control is desired by a convenient method. The 'locus' is intended to include soil, seeds and seedlings, as well as established vegetation. The composition can be used over a wide range of crops, such as corn (maize), wheat, rice, potato or sugarbeet. Suitable crops include those which are tolerant to one or more of components (A) or (B), or to any other herbicide, such as glyphosate that can be additionally included in the composition." (See page 5, lines 20-26). Cornes also teaches "a herbicidal composition according to claim 3, wherein the weight ratio of component (A) to component (B) is between about 8:1 and 1:15." (See page 11, claims 4). Cornes further teaches "... the composition contains components (A) and (B) in relative amounts sufficient to provide an application rate of at least 1.0 kg/ha, of which component (A) provides at least 0.02 kg/ha." (See page 5, lines 13-14). The compounds of the composition may be applied either separately or in combination as part of a two-part herbicidal system. (See page 5, Lines 17-19). The composition can be applied pre-emergence or post-emergence to the locus where control is desired. (See page 6, Lines 2-4).

Ascertainment of the Difference Between Scope the Prior Art and the Claims
(MPEP §2141.012)

The instant application claims a composition to control weeds in a crop of sorghum. The difference between the instant claims and Cornes is that Cornes does not teach the use of the composition on sorghum. However, it is known in the prior art that mesotrione and prosulfuron have been used to treat cereal crops of which sorghum is a cereal crop. It is for that reason that the examiner joins Kent et al. with Cornes.

Kent et al discloses, "The principal cereal crops are wheat, barley, oats, rye, rice maize, sorghum, and the millets" (See page 1, paragraph 1).

Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)

It would have been obvious to one having ordinary skill in the art to modify the invention of Cornes to be applied on sorghum crop because cereal crops are taught by Cornes and sorghum is classified as a cereal crop, thus one would expect Cornes's composition to also work on sorghum. With regard to the application rate of mesotrione, Cornes discloses an application rate, which encompasses the instant rate of 50- 300 g/ha as recited in the claimed invention. In the absence of showing of the criticality of the narrower application rate disclosed in the instant invention, Cornes makes obvious the instant application rate. With regard to the amount of component B (prosulfuron) amounting to 0.5 – 400%, Cornes teaches a ratio of 8:1 and 1:15. Thus it would be obvious to one of ordinary skill in the art to manipulate the amount of herbicide B in view

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of the guidance provided by Cornes and to obtain the optimal concentration. For the foregoing reasons the instant method of controlling weeds would have been obvious to one of ordinary skill in the art at the time of the instant invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Soroush whose telephone number is (571) 272-9925. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm E.S.T..

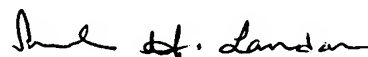
If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number For the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business

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Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ali Soroush
Patent Examiner
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